

5 ABSTRACT OF THE DISCLOSURE

A method of separating or concentrating hydrocarbon-containing gas mixtures such as hydrogen from hydrocarbons, carbon dioxide from hydrocarbons, nitrogen from hydrocarbons, and hydrocarbons from one another using a selectively permeable membrane. The method is well suited to separate hydrocarbon-containing mixtures such as those  
10 generated by petroleum refining industries, petrochemical industries, natural gas processing, and the like. The membranes exhibit extremely good resistance to plasticization by hydrocarbon components in the gas mixture under practical industrial process conditions.